

Report to Congressional Requesters

December 1992

## LOAN GUARANTEES

# Export Credit Guarantee Programs' Costs are High







United States General Accounting Office Washington, D.C. 20548

#### **General Government Division**

B-251662

December 22, 1992

The Honorable Bob Wise, Chairman
The Honorable Al McCandless, Ranking
Minority Member
Subcommittee on Government Information,
Justice, and Agriculture
Committee on Government Operations
House of Representatives

This report responds to your request that we examine program costs of the Commodity Credit Corporation's (CCC) Export Credit and Intermediate Export Credit Guarantee Programs in the U.S. Department of Agriculture (USDA). These programs are also known as the General Sales Manager (GSM)-102/103 programs. Specifically, you asked us, in light of the programs' large exposure to Iraq and the former Soviet Union, to estimate these programs' costs. You also asked us to determine whether the GSM-102/103 programs have helped increase U.S. exports worldwide.

#### Results in Brief

As of June 30, 1992, ccc had approximately \$9.04 billion outstanding in GSM-102/103 guarantees on loan principal and \$4.51 billion in accounts receivable resulting from loan guarantee payouts on delinquent GSM-102/103 guaranteed loans. We estimate the cumulative costs of the programs at about \$6.5 billion, or 48 percent of the total \$13.55 billion, if the programs had been terminated on June 30, 1992. Past operations of the programs have incurred high costs because CCC has provided a large amount of guarantees to high-risk countries, such as Iraq and the former Soviet Union. Guarantees had been extended to such high-risk countries because of market development reasons and foreign policy considerations.

We estimate that the program costs will increase by about \$74 million for each year the GSM-102/103 programs continue, a relatively small amount, assuming that loan guarantee exposure to each participating country is unchanged. However, extending guarantees to new program participants or increasing exposure to existing high-risk participants will generally incur high additional costs.

The cumulative cost of the programs is the difference between the face value and the actual value of both the CCC's accounts receivable and the outstanding guaranteed loans. We based our estimates of the actual value of the accounts receivable and guaranteed loans on the secondary market for less developed country (LDC) debt. We regard valuation of this debt

based on the secondary market as the most reliable method to estimate ccc costs. Our estimates of the programs' costs assume that (1) the outstanding guarantees will remain at the same level to each of the recipient countries while the programs continue; (2) the average risk of outstanding guarantees will remain unchanged as new guarantees replace old ones; and (3) the average risk of the June 30, 1992, accounts receivable will remain unchanged. If the level of outstanding guarantees continues to grow, or the average risk of the outstanding guarantees or the June 30, 1992, accounts receivable increase, then we expect the programs' costs will be higher than the estimates we present.

On the question of whether the GSM-102/103 programs have increased U.S. exports worldwide, we were unable to obtain any empirical evidence that answers this very difficult question. However, program officials did present us with some case studies and examples that show that these programs have helped boost U.S. agricultural exports to individual countries at specific times.

#### Background

To expand exports of U.S. agricultural commodities, the U.S. government, through the Department of Agriculture's CCC, guarantees repayment of bank-financed loans to foreign buyers under the Export Credit Guarantee Program (GSM-102) and the Intermediate Export Credit Guarantee Program (GSM-103). These programs help the United States compete with Canada and the European Community in financing agricultural exports. The GSM-102 program, which began in 1981, is a short-term export loan guarantee program for transactions with repayment periods of 6 to 36 months. In practice, most of these guaranteed loans have repayment periods of 36 months. The GSM-103 program, which began in 1986, is an intermediate-term loan guarantee program for transactions with repayment periods of more than 3 but not more than 10 years.

ccc and the USDA's Foreign Agricultural Service (FAS), with advice from the National Advisory Council on International Monetary and Financial Policies, <sup>1</sup> annually allocate guarantees for specific agricultural commodities and countries. Allocations are based on an individual country's agricultural needs, its market development potential for U.S. commodities, and the ability of and likelihood that the country's financial sector (or government) will repay the guaranteed loans.

<sup>&</sup>lt;sup>1</sup>The National Advisory Council is an interagency group that gives advice to government agencies, such as CCC, on international financing matters. Council members include the Departments of the Treasury, State, and Commerce; the Federal Reserve Board; the U.S. Export-Import Bank; the Office of the U.S. Trade Representative; and the International Development Cooperation Agency.

From the GSM-102 program's inception in 1981 through June 30, 1992, about \$40.9 billion in guarantees for loan principal have been provided under the GSM-102/103 programs. Generally, guarantees have been allocated to countries that have not been able otherwise to borrow dollars from private lenders to buy U.S. agricultural exports. CCC usually guarantees 98 percent (100 percent for the former Soviet Union) of loan principal, and some of the interest on these loans. Outstanding loan guarantees on export credits averaged \$7 billion (of principal) during the last 11 years, and the loan guarantees had an average life of 1.8 years. On June 30, 1992, CCC had \$9.04 billion outstanding in GSM-102/103 guarantees on loan principal and \$4.51 billion in accounts receivable resulting from guarantee payouts on previously delinquent GSM-guaranteed loans. CCC attempts to collect the accounts receivable directly from the debtor country.

# Scope and Methodology

The scope of this review was limited to estimating the cumulative cost of the GSM-102/103 programs and determining whether there is any evidence that these programs increased U.S. agricultural exports worldwide.

The cumulative cost of the programs is the difference between the face value and the actual value of both the CCC's accounts receivable and the outstanding guaranteed loans. We estimated the actual value of the CCC's accounts receivable and the guaranteed loans (net of the value of these guarantees) that were outstanding as of June 30, 1992. We based these estimates on our analysis of the secondary market for LDC debt for the 2-week period beginning the last week of May 1992. Valuing the debt in this way is referred to as "mark to market."

We discussed various aspects of the programs with program officials and evaluated evidence they provided concerning these programs' effects on U.S. agricultural exports.

We did our work in Washington, D.C., and New York City from April 1992 through December 1992 in accordance with generally accepted government auditing standards. A fuller description of the methodology used in this review is contained in appendix I.

## GSM-102/103 Programs' Costs Are High

We estimate that the GSM-102/103 programs would have cost CCC about \$6.5 billion, or 48 percent of the then-\$13.55 billion in loan guarantees and accounts receivable if the programs had been ended on June 30, 1992. We estimate that program costs will increase by about \$74 million for each

year the GSM 102/103 programs continue to operate. For example, if the programs continue for 3 years and are then shut down, we calculate that the programs' costs will rise to \$6.7 billion, or about 49 percent of the outstanding guarantees and receivables as of June 30, 1992. At 15 years, we estimate that the programs' costs will rise to about \$7.6 billion, or 56 percent of these guarantees and receivables (see tables 1 and 2).

**Table 1: GSM-102/103 Programs' Estimated Costs** (Based on June 30, 1992, Balances Outstanding)

Dollars in billions

	Loan guarantees	Accounts receivable <sup>a</sup>	Total
Current loan amounts outstanding	\$9.04	\$4.51	\$13.55
Estimated costs if programs had been ended on June 30, 1992	3.54	2.95	6.49
Estimated costs if programs continue for			
3 years	3.75	2.95	6.70
5 years	3.90	2.95	6.85
10 years	4.28	2.95	7.23
15 years	4.65	2.95	7.60

<sup>&</sup>lt;sup>a</sup>Includes delinquent payments owed CCC and rescheduled debt not yet due.

Source: GAO's analysis of Agricultural Stabilization and Conservation Service data.

Table 2: GSM-102/103 Programs' Estimated Costs as a Percentage of June 30, 1992, Outstanding Balances

	Loan guarantees	Accounts receivable	Total costs
Estimated costs as a percentage of outstanding loan amounts if the programs had been closed on June 30, 1992	39.1	65.3	47.8
Estimated costs as a percentage of outstanding loan amounts if the programs continue for			
3 years	41.5	65.3	49.4
5 years	43.1	65.3	50.5
10 years	47.3	65.3	53.3
15 years	51.5	65.3	56.1

Source: GAO's analysis of Agricultural Stabilization and Conservation Service data.

The costs of outstanding GSM loans and guarantees are high because CCC provided large amounts of guarantees to high-risk countries, including Iraq<sup>2</sup> and the former Soviet Union (including Russia.)<sup>3</sup>

The Food and Security Act of 1985 mandated an increase in total annual allocations for the GSM programs in fiscal years 1986 through 1990 and caused CCC to allocate more guarantees to high-risk countries. In August 1986, GSM-102/103 program officials told us that CCC was having difficulty finding creditworthy countries for that year's larger allocation. They said that the programs' larger allocations would require that guarantees be made to less stable countries, thus increasing (1) the chance of nonpayment and (2) the ccc's cost. Moreover, the Food, Agriculture. Conservation, and Trade Act of 1990 (P.L. 101-624) mandates that allocations for the GSM-102 program must always be "not less than \$5,000,000,000 in credit guarantees" for each of the fiscal years 1991 through 1995. It also changes the GSM-103 program allocation from not more than \$1 billion for both fiscal years 1989 and 1990 to "not less than \$500,000,000" for each of the fiscal years 1991 through 1995. Furthermore, the act requires that, in addition to those amounts, "the Commodity Credit Corporation, for the fiscal years 1991 through 1995 shall make available not less than \$1,000,000,000 of export credit guarantees for exports to emerging democracies...."

The CCC's allocations of credit guarantees have been based on an assessment of a country's agricultural needs, its market development potential, and the likelihood that a country's financial sector (or government) will repay the guaranteed loans. In the past, decisions to provide loan guarantees to countries have often been influenced by foreign policy considerations. Principal recipients of guarantees have often been countries in which the United States has had significant foreign policy interests, such as Mexico, South Korea, Iraq, and the former Soviet Union and Russia. Furthermore, over the years, some program officials have told us that foreign policy considerations have sometimes overridden

<sup>&</sup>lt;sup>2</sup>In August 1990, the U.S. government established economic sanctions against Iraq in response to its invasion of Kuwait. Iraq responded to the U.S. action by ceasing to service its debt owed the United States, including approximately \$2 billion of debt outstanding under the GSM programs. As of June 30, 1992, CCC had paid out over \$1.32 billion because of Iraqi loan delinquencies, had received \$370 million more in requests for payment from Banca Nazionale del Lavoro, and stands to pay out an additional \$368 million more on outstanding guaranteed loans as Iraqi payments come due and are delinquent.

<sup>&</sup>lt;sup>3</sup>In January 1991, the Secretary of Agriculture for the first time authorized credit guarantees—\$1 billion in GSM-102 loan guarantees—for the now-former Soviet Union for use during fiscal year 1991. It now appears that Russia will be responsible for most if not all of the former Soviet Union's external debt. Except for Iraq, of those countries with outstanding guarantees on June 30, 1992, Russia had the lowest September 1992 Euromoney credit ratings.

creditworthiness considerations when the amount of allocations were determined for some major program recipients. However, the Food, Agriculture, Conservation, and Trade Act of 1990, signed into law on November 28, 1990, now prohibits the GSM programs from being used for foreign policy purposes.

From October 1, 1978, until September 30, 1992, Mexico, South Korea, Iraq, and the former Soviet Union (including Russia) have received the largest allocations of all participating countries under the export credit loan guarantee programs. These countries purchased \$10 billion, \$6.1 billion, \$5.1 billion, and \$4.4 billion, respectively, of the \$45.3 billion in U.S. agricultural commodities sold under these programs. Together these four countries purchased 56.5 percent of these programs' sales. Mexico, South Korea, and Iraq participated in these programs for a long time. Credit guarantees for the former Soviet Union were only approved for the first time in January 1991. (See app. II for a list of fiscal year 1992 loan guarantee recipients and the amounts they received.)

### Assumptions and Issues Related to Cost Estimates

We based our cost estimates on our analysis of the secondary market for LDC debt during the 2-week period beginning the last week of May 1992 and the programs' outstanding guarantees and accounts receivable as of June 30, 1992. In order to develop our cost estimates, we assumed that (1) the outstanding guarantees remain at the same level to each of the recipient countries while the programs continue; (2) the average risk of outstanding guarantees remains unchanged as new guarantees replace old ones; (3) the average risk of the June 30, 1992, accounts receivable remains unchanged; and (4) two consecutive loans of equal size and maturity to a country are equivalent in risk and price to one loan of the same size, but with twice the maturity, to that same country.

If the level of the outstanding loans and guarantees continues to grow, then we expect that costs from future operations will be even higher. However, there are very large cost efficiencies in allocating guarantees to the same country consecutively over time, compared to (1) allocating guarantees to multiple equally creditworthy countries, each receiving

<sup>&</sup>lt;sup>4</sup>These data, provided by FAS, include a small amount of sales under the GSM-101 program as well as the GSM-102/103 programs. FAS told us it was not able to readily separate out the GSM-101 data.

<sup>&</sup>lt;sup>6</sup>For further discussion of CCC credit guarantees granted the former Soviet Union, see International Trade: Soviet Agricultural Reform and the U.S. Government Response (GAO/NSIAD-91-152, June 28, 1991).

proportionally smaller guaranteed loans with the same maturity;<sup>6</sup> or (2) allocating to that same country guarantees for larger loans with proportionally shorter maturities.

To illustrate this point, consider two countries that are potential program participants, each equally creditworthy and having the same rates of guarantee costs. For the purpose of this example we assume that the CCC's cost for a guarantee extended to either country is the same as for the average outstanding guarantee on June 30, 1992. In our examples, all the guaranteed loans are assumed to have a maturity of 3 years, the typical term of a newly guaranteed loan. We estimate that granting guarantees for two consecutive \$1-million loans to only one of these countries will cost CCC about \$440,000. However, we estimate that granting each country a guarantee for a \$1-million loan will cost CCC about \$831,000 (or 88.8 percent more). This sum is also the estimated cost of granting one of the countries a guarantee for a \$2-million loan.

We should point out that in its most recent financial statement—for the period ending September 30, 1991—CCC recognizes a lower percentage cost than the 48 percentage we estimate if the GSM-102/103 programs had been terminated on June 30, 1992. CCC estimates a percentage cost for its foreign GSM programs of 30.9 percent. Our estimate differs from theirs because ours (1) is based on more current information, and (2) uses "mark to market" techniques so that value estimates are more closely tied to secondary market prices, rather than an analyst's subjective judgment.

## Programs' Effect on U.S. Agricultural Exports

The programs' effect on U.S. agricultural exports worldwide cannot be easily isolated from that of other policies and economic conditions that contribute to U.S. agricultural exports—lower interest rates, other U.S. government assistance, depreciation of the U.S. dollar against competitors' currencies, production shortfalls, and other changes in global economic conditions.

The effect on U.S. exports worldwide, called "worldwide additionality," is also dependent on the buying and selling decisions of competing exporters and importers. For example, competing suppliers may respond to U.S. competition in countries that benefit from the GSM programs by concentrating their efforts in other countries and displacing potential U.S. sales in these other countries. Thus, while U.S. exports may increase in

<sup>&</sup>lt;sup>6</sup>Because the costs of redistributing an existing portfolio are high, the net benefits from portfolio diversification of LDC debt are much greater if diversification occurs when the portfolio is first created

particular markets in certain program countries, the overall effect on U.S. exports worldwide is uncertain. If this displacement occurs, these programs may merely reroute trade flows and not necessarily increase total U.S. agricultural exports.

Program officials did not provide us with any evidence demonstrating worldwide additionality. They did, however, give us a 1985 Foreign Agricultural Service case study of selected loan recipient countries, and a number of other more recent examples. These case studies and examples show that U.S. agricultural exports to certain program countries have increased at particular times.

#### Conclusions

The cost of operating ccc's GSM-102/103 programs has been very high. Large costs were incurred when ccc provided higher levels of guarantees to existing program participants or added new countries to the programs. How much additional cost will be incurred in operating the programs in the future depends on the characteristics of any new loan guarantees that ccc makes. "Rolling over" existing guarantees to current program participants imposes relatively little additional cost. However, increasing the amounts of outstanding guarantees to most existing program participants or adding new high-risk countries to the program will add substantial additional cost.

The high cost of incurring new exposures is particularly important to note because program officials were unable to provide us with any evidence demonstrating worldwide additionality for the programs. That is, while costs have been incurred, the extent of any meaningful benefits is unknown. Therefore, it is very important to give careful attention to future program costs.

### Matter for Congressional Consideration

Because (1) the additional cost of increasing loan guarantee exposure to existing participants or adding new participants to the programs is high and (2) program officials were unable to provide us with any evidence demonstrating worldwide additionality, Congress may wish to consider whether to limit future program cost increases. One simple way to limit future program cost increases is to restrict most future GSM-102/103 guarantees to current participants at existing levels.

## Agency Comments and Our Evaluation

FAS officials believe our estimates of the GSM-102/103 programs' costs are too high and do not take into consideration the actual repayment histories of these programs. They said that CCC has paid out in guarantees on principal only \$3.6 billion of the total \$40.9 billion in guarantees of principal issued by the GSM-102/103 programs since 1981, or 8.7 percent of the principal guarantees provided. We believe the ccc's approach to portraying program payouts is misleading for several reasons. First, a meaningful payout rate should not be influenced by the maturity of the guaranteed loans. However, the ccc's portrayed payout rate is greatly diminished by the relatively short average maturity of CCC-guaranteed loans. Second, the programs' high growth created special incentives for participants to temporarily remain current on their debt service. The repayment of old guaranteed debt was in effect encouraged by the provision of larger amounts of new guaranteed debt. The historical payout rate does not capture what would happen if the programs were not growing, let alone what would happen if the programs were terminated or a high-risk participating country were dropped from the programs. And, third, since payouts are usually made only for scheduled loan payments as they become delinquent, rather than for the entire loan, additional payouts for some currently delinquent loans are to be expected.

FAS officials also disagree with our assessment of the riskiness of the outstanding loan guarantees and accounts receivable. Furthermore, they question our use of the secondary market to estimate GSM-102/103 program costs. Our view is that assessing risk in the current portfolio using mark to market techniques is a more accurate way to estimate the programs' costs. It uses the most current data, rather than outdated historical data, and is not subject to institutional biases. Their views, and our evaluation, are discussed in appendix III.

As you requested, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Chairmen of the Senate Committee on Agriculture, Nutrition, and Forestry and the House Committee on Agriculture; the Chairmen of the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Banking, Finance and Urban Affairs; the Secretaries of Agriculture and the Treasury; and the Director of the Office of Management and Budget. We will also make copies available to other interested parties upon request.

Please contact me on (202) 275-4812 if you or your staff have any questions regarding this report. The major contributors to this report are listed in appendix IV.

Allan I. Mendelowitz, Director

International Trade and Finance Issues

allan 8. Mendelowitz

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	Abbreviations	t- <u></u>
	CCC Commodity Credit Corporation  FAS Foreign Agricultural Service  GSM General Service Manager  LDC less developed country  USDA U.S. Department of Agriculture	

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# Methodology Used to Estimate the Programs' Costs

In order to calculate the costs for the General Sales Manager (GSM)-102/103 programs, we estimated the market value of the outstanding loans with CCC guarantees—net of the value of these CCC guarantees—plus the CCC's accounts receivable that resulted from guarantee payouts. We estimated value for the loans and guarantees based on the secondary market for trading debt owed by less developed countries (LDC). We believe that this market provides the best available risk-based valuations of LDC debt.

Much debt traded on this secondary market is variable interest rate debt and, thus, its price does not change because of general interest rate movements on world financial markets. Prices are discounted from face value in this secondary market to reflect investors' assessments of the large risk associated with this LDC debt or because there may be other factors present that impair the value of the debt.

If no market forces other than the evaluation of risk by investors were present, then the price would be an unbiased measure of its value. Under these circumstances, for example, if debt owed by a country had a price of 40 percent of face value, then the market expects that this debt would, on average, pay back only about 40 percent of its face value. Therefore, investors in this market, on the average, expect that an institution that had obtained this loan at face value will incur expenses that exceed payments received by about 60 percent of face value. Thus, 60 percent of face value is this institution's expected cost of owning this loan.

In addition, if no other market forces were present, prices would respond only to changes in investors' perceptions of risk. For example, if investors believed the debt of an LDC were less risky than its price indicated, investors would have an incentive to buy this debt and, as a group, cause the price of this debt to increase. Similarly, if investors believed an LDC's debt to be more risky than its price indicated, then investors would have an incentive to sell this debt and, as a group, cause the price of this debt to be lower.

Our analysis of the LDC debt market for the last week in May and the first week in June 1992 indicates that secondary market prices are based almost exclusively on investors' perceptions of the loans' risk, because

<sup>&</sup>lt;sup>1</sup>This secondary market is an over-the-counter market in which dollar debt owed by LDC governments or private enterprise is traded. Volume has grown quickly. It was approximately \$2 billion (face value) in 1985, \$5 billion in 1986, \$70 billion in 1990, and is expected to be about \$220 billion in 1992.

other market forces that were especially pronounced 4 and 5 years ago now appear to be minimal.<sup>2</sup>

To estimate the costs of the GSM-102/103 programs, we first regressed secondary market prices for variable interest rate, dollar-denominated loans and bonds on the debtor LDC's credit rating recently published by Euromoney and on various characteristics of the debt instrument.<sup>3</sup>

We obtained the following results:

PRICE = 
$$-4.06 + 1.45*EM - 0.21*MAT - 0.26*ARR$$
  
 $(-0.4) (14.8) (-0.6) (-3.2)$   
 $+ 52.0*D - 0.52*D*EM - 1.36*D*MAT, R = 0.943, n = 38,$   
 $(4.8) (-3.0) (-3.1)$ 

where PRICE equals the average secondary market price for the LDC debt instrument during the 2-week period beginning the last week of May 1992, net of the then-market price of any collateral or guarantees for that debt instrument; EM equals the Euromoney risk rating of the debtor country that was published in September 1992; MAT equals the time remaining until maturity of the debt instrument; ARR equals the months in arrears (if any) of the debt instrument; D is a dummy variable, equal to 0 for loans and 1 for bonds, used to capture differences between loans and bonds; and the "t" statistics are in parentheses.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup>In testimony on appropriate reserve levels for LDC debt that we gave 5-1/2 years ago, we obtained estimates of appropriate reserves based on the secondary market for LDC debt. We found that, overall, market forces other than investors' risk evaluation had caused LDC market prices to be too high and market-based reserves (accounting's measure of cost) too low for investors' perceptions of market risk. These market forces included (1) the "contamination effect," which caused large U.S. banks to restrict their supply of discounted foreign debt for sale on the secondary market for fear that if they sold any part of an LDC's debt, their auditors would require that they "mark to market" all of that LDC's remaining debt; (2) debt-equity swap programs that allowed an LDC to purchase (through a middleman) its debt on the secondary market and thereby increase demand for its debt for other than risk evaluation reasons; and, least important and with opposite directional effect (3) "dumping," or selling primarily motivated by other than risk evaluation reasons. For a more complete description of the analysis contained in this testimony, see International Banking: Supervision of Overseas Lending Is Inadequate (GAO/NSIAD-88-87, May 5, 1988).

<sup>&</sup>lt;sup>3</sup>Euromoney, one of the leading magazines for financial institutions in the world, publishes country credit ratings in September of each year. The September 1992 Euromoney credit ratings covered 169 countries and were a compilation of 9 subcategories, including a survey of political risk analysts; debt indicators; access to various markets, including the Eurobond market; and credit ratings when performed by Moody's and Standard & Poor's, two of the world's leading credit rating agencies. These rating agencies rate only those LDCs that are among the most creditworthy.

<sup>&</sup>lt;sup>4</sup>The "t" statistic is the estimated coefficient divided by its estimated standard deviation, and is used to test whether an estimated coefficient is statistically different from zero.

Appendix I Methodology Used to Estimate the Programs' Costs

Overall, the regression results were remarkably good. The explanatory power of the regression was high, and independent variables had the directional effect expected from theory and were (with one exception) very statistically significant at the 99-percent confidence level. In addition, as expected from theory, the regression implies that bond prices were greater than loan prices as long as the debtor country has a credit rating sufficiently high to issue bonds.<sup>5</sup>

We then used this regression to "mark to market," or price outstanding GSM loan guarantees and accounts receivable. Estimated costs were the difference between face value and the estimated market price.<sup>6</sup>

In order to be conservative in our cost estimates, we treated an LDC's GSM-102/103 guarantees and accounts receivable as if they were bonds if the LDC had at least as good a credit rating as most LDCs that had issued bonds. We treated an LDC's accounts receivable and guarantees as if they were loans if the LDC had a lower credit rating. Overall, 48.5 percent of the GSM portfolio was treated as bonds. For calculating the costs of the June 30, 1992, accounts receivable, we set maturity equal to 10 years, their average maturity. For calculating the costs of the outstanding guarantees, we initially set maturity equal to 1.8 years, their past average life, and then increased maturity as we increased our assumption about how long these GSM programs would continue.<sup>7</sup>

<sup>&</sup>quot;LDC debt traders gave us three reasons why investors believe bonds are more likely to be paid than loans and thus command a higher price. First, bonds are often owned by individuals, who are more likely to sue and less likely to agree to debt relief than are banks. Second, bonds have often been a small part of a country's external debt. Given the difficulty of getting debt relief from individual bond owners, LDCs have had a greater incentive to stay current on their bond payments. Third, bonds have been fully serviced by Latin American LDCs during the current LDC debt crisis, even when these same LDCs have been delinquent in paying bank loans.

<sup>&</sup>lt;sup>6</sup>We also followed the same methodology but replaced the <u>Euromoney</u> credit ratings with the credit ratings that were obtained in a survey of 75 to 100 large international banks that was published in the September 1992 issue of <u>Institutional Investor</u>. Overall, these regression results were quite good, although the regression's explanatory power was slightly lower than the regression we present. Also, the resulting cost estimates were slightly lower than those we present.

<sup>&</sup>lt;sup>7</sup>We were unable to obtain estimates of maturity on a country-by-country basis because of limitations in the data the Commodity Credit Corporation (CCC) provided us.

# Countries Receiving GSM-102/103 Approved Loan Guarantees in Fiscal Year 1992

U.S. dollars in millions	
Country	Approved guarantees
Algeria	\$580.6
Angola	4.4
Colombia	14.0
Czechoslovakia	2.0
Ecuador	1.2
Egypt	21.9
El Salvador	0.7
Ghana	3.6
Grenada	0.2
Guatemala	3.3
Hungary	2.6
Indonesia	14.6
Jordan	6.1
Kenya	10.0
Mexico	1,313.1
Morocco	18.1
Pakistan	250.0
Panama	3.8
Romania	49.6
Russia	643.8
Senegal	15.6
South Korea	478.2
Soviet Union	1,831.9
Sri Lanka	26.8
Trinidad & Tobago	47.5
Tunisia	49.2
Turkey	29.6
Ukraine	109.0
Venezuela	97.4
Yemen	35.0
Zimbabwe	19.7
Total	\$5,683.6

Source: Foreign Agricultural Service.

## Agency Comments and Our Evaluation

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



Foreign Agricultural Service Washington, D.C. 20250

16 NOV 1992

Allan I. Mendelowitz, Director International Trade and Finance Issues U.S. General Accounting Office Washington, D.C. 20548

Dear Dr. Mendelowitz:

We appreciate the opportunity to have our comments included as an appendix in your latest report on the U.S. Department of Agriculture's (USDA) Commodity Credit Corporation's (CCC) Export Credit and Intermediate Export Credit Guarantee Programs (GSM-102 and GSM-103).

Our overriding concern is that the report looks at the programs' operations as an academic exercise and does not acknowledge the legislative mandate or history of operation. The basic premise of the program is that CCC's credit guarantees allow business to be done at levels of financial risk beyond those with which the private sector would be comfortable. The issue that we at USDA grapple with every day is "What is an acceptable level of risk that allows us to meet our mandate from the Congress to develop, expand, and maintain overseas markets for farm commodities at the least possible cost to the American taxpayer?"

In writing the Food, Agriculture, Conservation, and Trade Act of 1990, Congress laid out three specific goals for the credit guarantee programs:

- (1) develop, expand, or maintain the importing country as a foreign market, on a long-term basis, for the commercial sale and export of United States agricultural commodities, without displacing normal commercial sales:
- (2) improve the capability of the importing country to purchase and use, on a long-term basis, United States agricultural commodities; or (3) otherwise promote the export of United States agricultural commodities.

A Senate report on the 1990 Act described the export credit guarantee programs as "a primary tool for assisting the export of U.S. agricultural commodities. By guaranteeing letters of credit issued to finance export sales, the Corporation facilitates sales that might not otherwise be made..." The Senate report goes on to say that the GSM-102 program "may be used to increase exports, to meet foreign competition and to assist countries in meeting their food and fiber needs." For GSM-103, the Secretary of Agriculture "must determine that the sale will develop, expand or maintain long-term commercial sales of agricultural commodities or improve the long-term capability of the importing country to purchase agricultural commodities."

See comment 1.

The 1990 Act does restrict CCC from making "credit guarantees available in connection with sales of agricultural commodities to any country that the Secretary determines cannot adequately service the debt associated with such a sale." USDA enforces that restriction through its risk assessments (which we will discuss later) and, for active programs, through our suspension policy. If a purchasing country defaults on a payment, future sales under the program immediately are suspended and no further registrations of sales are made until the debt is current.

The GAO report estimates that U.S. taxpayers would be forced to foot the bill for nearly half the guarantees extended by USDA. This estimation blatantly ignores USDA's 12-year track record with the credit guarantee programs. Since these programs have been in existence, USDA (and the U.S. taxpayer) has only had to make payment on about 8 percent of the over \$40 billion in short-term loans that we have guaranteed--a number far lower than that calculated by the GAO. GAO maintains that USDA's track record is not an accurate indicator of the riskiness of CCC loan portfolio.

But other reviewers, including other arms of GAO, are not so quick to dismiss USDA experience or accounting techniques. The percentage cost allowance for the GSM programs included on CCC's financial statements for the fiscal year ended September 30, 1991, was about 30 percent of the total GSM portfolio, considerably less than this report's 47.8 percent estimate.

The methodology used by CCC to calculate the percentage cost allowance for the GSM programs was reviewed by the USDA Office of Inspector General (OIG) during its 1991 financial statement audit. OIG reported to the CCC Board of Directors in a September 22, 1992 audit letter that "In our opinion, the financial statements present fairly, in all material respects, the financial position, operational results, and related financial activities of CCC as of September 30, 1991 and 1990." This statement of findings reflects that CCC's estimates are reasonable and have been calculated in accordance with generally accepted accounting standards. During the 1989 and 1990 audits, CAO's financial audit team came to the same conclusion regarding the appropriateness of the allowance calculation and methodology.

As further evidence of our concern that GAO is looking at the export credit guarantee programs from an academic rather than a "real world" perspective, we examined the report's recommendation that USDA "limit increases in each country's outstanding guarantees to countries that are substantially more credit-worthy, as measured by professionally recognized ratings like those published in <u>Euromoney</u> or <u>Institutional Investor</u>, than is the average country with outstanding guarantees."

GAO representatives explained that by this they mean that USDA should shift the focus of its guarantee programs from more risky countries to less risky countries based on the use of secondary market indicators. For example, the current Euromoney average risk index for countries in CCC's portfolio is 37.8, according to GAO. GAO staff indicated that their recommendation implies that USDA should reduce guarantees to countries with a Euromoney risk index less than that level and increase guarantees to countries with an index rating above that level. However, this recommendation apparently is made without consideration of its practical implications.

See comment 2.

See comment 3.

See comment 4.

See comment 5.

See comment 6.

In the September 1992 Euromoney index, only 65 countries in the world have a rating above 37.8 and of these, 30 have an index rating of 75.0 or greater. These countries having an index rating of 75.0 or greater include the wealthy industrialized OECD countries plus Singapore, Taiwan, Hong Kong, Saudi Arabia, the United Arab Emirates, South Korea, and Bahrain. If such relatively wealthy countries are excluded from consideration for credit guarantees (because, for the most part, they already are cash customers for U.S. agricultural products and the provision of credit guarantees would not greatly expand their purchases), no more than 35 countries would be available for increased programming under GSM-102/103. However, a close review of this remaining list reveals that the potential for increased GSM programming is limited.

The list of 35 potential GSM participants contains several traditional agricultural exporters such as Thailand, Turkey, South Africa, Chile, Hungary, Argentina, and Uruguay. Some of these countries have or have had small GSM programs to import selected agricultural commodities which they do not produce, but the potential for greatly increased GSM programming is quite limited. USDA offered a total of \$87 million in GSM guarantees to Chile, Turkey, Hungary, and Argentina in fiscal 1992--only \$33 million was used.

Also on the list of 35 potential participants are several large agricultural importers that we have tried from time-to-time to recruit for the GSM program, but which have shown no, or only limited, interest because they have a policy or tradition of purchasing largely without credit. These include China, India, Malaysia, and Indonesia. Only recently have we been able to commence modest GSM-102 programs in Malaysia and Indonesia.

The best GSM prospect in the above-average credit risk list, Mexico, already accounts for a quarter of the GSM portfolio which also argues against significant increases in programming there.

That leaves only 23 countries on GAO's implied list. However, three of those countries--Israel, Kuwait, and Brunei--had <u>Euromoney</u> Indices above 70. Another major agricultural importer, Pakistan, had an index rating of only 39.6, just barely above the average. The remaining 19 markets are Qatar, Malta, Cyrpus, Oman, Bahamas, Colombia, Czech Republic, Tunisia, Venezuela, Botswana, Papua New Guinea, Morocco, Slovakia, Zimbabwe, Fiji, Barbados, Trinidad and Tabago, Mauritius, and Belize. Agricultural imports by these 19 countries together accounted for less than 3 per cent of world agricultural trade. In our view, re-directing the focus of one of our principle export expansion tools toward a group of countries that account for less than 3 per cent of the market for agricultural products would not be an effective long-term trade strategy.

The GAO report also raises the issue that four countries allegedly were granted credit guarantees for only foreign policy reasons. The report makes no attempt to assess whether there were legitimate market development/export expansion reasons for granting these credits. In all four countries cited, U.S. market development potential was clear and, therefore, meet the primary program mandate. These were and, with the exception of Iraq, remain major U.S. agricultural export markets where the availability of credit guarantees is crucial to U.S. participation in the market.

See comment 7.

For example, Mexico has been a steadily growing customer for U.S. agricultural exports. Mexico's agricultural imports have doubled during the past 5 years, approaching \$5 billion from all sources. The availability of GSM financing has allowed U.S. agriculture to participate in that growth in a significant way. South Korea is a major world agricultural market where GSM financing has been instrumental in allowing U.S. exporters to maintain and expand U.S. sales. With \$7.2 billion in imports in 1990, Korea was second only to Japan among Pacific Rim countries in total agricultural imports.

In the latter half of the 1980's, Iraq became a major agricultural importer, averaging over \$2 billion in imports per year. With a population that grew from 13 million in 1980 to almost 19 million by 1990, Iraq became one of the world's largest rice importers, taking 500,000-600,000 metric tons per year by the late 1980's. Iraq also was a market for more than 3 million metric tons of wheat per year, making it, in 1988/89 for example, the world's sixth largest wheat importer.

The former Soviet Union unquestionably has been one of the world's major agricultural importers. With 1991/92 wheat imports at 22 million metric tons, the former Soviet Union accounted for nearly one-fifth of world trade in wheat. It remains the world's largest wheat importer. It also is the world's second largest feed grain importer. There was and remains intense interest on the part of U.S. farmers and exporters in maintaining this extremely important market.

We also have other concerns about the report. We continue to believe, as we have stated in comments on two previous reports on this issue, that the secondary market is a poor estimator for the value of the debt guaranteed by CCC. Since GAO and USDA have basically "agreed to disagree" on this issue, I will be brief with our concerns about the report's use of the secondary market as an accurate measure of risk.

The secondary market is an unregulated market for trading foreign debt owed to commercial banks. The market is dominated by banks and speculators who react to many non-risk related factors. The market is certainly vulnerable to manipulation by banks and debtors. The majority of the debt traded on the secondary market is debt extended by commercial banks that has been rescheduled several times. The average maturities on the debt are about 15 to 20 years. On the other hand, most of CCC's outstanding guarantees have a maturity of 3 years and were extended after the Paris Club contract cut-off date debt. Shorter term debts are less risky than long-term debts and post-contract cut-off date debts receive a higher priority for repayment. Further, most of CCC's outstanding guarantees also are backed by a credit guarantee assurance from the government of the importing country.

In addition, bank debt guaranteed by the U.S. government and loans extended by banks without guarantees frequently are treated differently. Countries that rate low in the secondary market may not make full payments of their bank debts, yet have good repayment records on GSM-guaranteed debt. USDA contacted the Lesser Developed Countries (LDC) trading desks of five major market players. All concurred that a pricing comparison between trade finance debt and the debt which is traded in the secondary market would not be at all meaningful. These traders also emphasized that trade finance transactions have generally been honored by most LDCs.

See comment 8.

See comment 9.

The secondary market is not the only "transformation mechanism" to get from a risk grade to a loan loss estimate. USDA's base letter grade ratings of countries are objective and can be easily replicated by anyone having access to international financial statistics. In USDA's system, countries are ranked according to ratios and indicators from the statistics. USDA country grades are also compared with rankings by <a href="Euromoney">Euromoney</a>, <a href="Institutional Investor">Investor</a>, and the interagency risk group.

In the past 18 months, USDA has taken numerous steps to improve its risk assessment capabilities. These measures include the institutionalization of a formal reconciliation committee process to more fully evaluate risk, a foreign bank analysis group and participation in an interagency review process that standardizes risk ratings among federal government agencies.

While our risk assessment process may not be fool proof, neither is any other system. And our track record shows our risk assessment process works! With only an 8 percent default rate over the years—and some of these defaults occasioned by political rather than financial factors—the system has demonstrated its worth in helping us run these programs in such a way to carry out the mandate of Congress to develop, expand, and maintain overseas markets for U.S. farm commodities at the least possible cost to the U.S. taxpayer.

Sincerely,

Stephen L. Censky Acting Administrator The following are GAO's comments on the Commodity Credit Corporation's letter dated November 16, 1992.

#### **GAO Comments**

- 1. The primary purpose of this review was to estimate the costs of the GSM-102/103 programs. Therefore, our report concentrated on the creditworthiness of the recipients as a main determinant of the programs' costs. CCC, of course, has based allocations on criteria other than just creditworthiness, such as to develop markets or to advance foreign policy interests. These other criteria were addressed to help explain why the typical recipient had low creditworthiness. For example, during the last 2 years, 43 percent of GSM program sales were to the former Soviet Union (including Russia). The former Soviet Union and Russia have had such a poor credit rating that other official creditors, including the International Monetary Fund and the World Bank, have been reluctant to provide substantial amounts of aid. Consequently, during the last 2 years, these GSM programs have provided the bulk of official world aid to the former Soviet Union and Russia.
- 2. Under the ccc's suspension policy, a country that was delinquent on previous guarantees and has had its debt rescheduled is eligible for new guaranteed loans, as long as it is current on its rescheduled debt. This suspension policy permits high-risk countries to remain in the programs.
- 3. Our \$6.5-billion cost estimate is 15.9 percent of the \$40.9 billion in guarantees (on principal) issued over the 11-year life of these programs and 47.8 percent of the \$13.55-billion outstanding guarantees and accounts receivable as of June 30, 1992.
- 4. We believe that the CCC's approach to portraying its loan payout rate is misleading for several reasons. First, a meaningful payout rate should not be influenced by the maturity of the guaranteed loans. However, the CCC's portrayed payout rate is greatly diminished by the relatively short average maturity (and thus large dollar volume) of CCC-guaranteed loans. We believe that the correct way to present the CCC's historical rate of payout is as a percentage of the average outstanding guarantees. We determined that the CCC's claims payout on principal over the last 11 years was 3.9 percent per year of its \$7-billion average outstanding balance of guaranteed principal.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Over the last 11 years, the total issued guarantees are much larger than the average outstanding balance of guarantees because guarantees were for short-term loans.

Second, the programs' high growth created special incentives for participants to temporarily remain current on their debt service. The typical borrower under this program is a high-risk LDC with large debt and very limited access to external funds; it must remain current on the programs' debt service payments in order to receive additional loans under these programs. Therefore, it has been in the participating LDC's interest to make preferential repayments, relative to other debt. If an LDC did so, new loans under these programs would be forthcoming, as indeed they often have been. We expect that when these programs are no longer such a ready source of funds, CCC will incur a higher payout rate. Indeed, this situation has already occurred with Iraq.

Third, since payouts are usually made only for individual loan payments as they become delinquent, rather than for the entire guaranteed loan, additional payouts for some currently delinquent loans are on the immediate horizon.

- 5. We last performed a financial audit of CCC for the period ending September 30, 1989—more than 3 years ago. Since that time, \$1.69 billion of guaranteed loans owed by Iraq have become delinquent, and the former Soviet Union has received \$4.4 billion in GSM-102/103 loan guarantees on principal. Even the most recent CCC financial audit by the U.S. Department of Agriculture's Inspector General is for the period ending September 30, 1991. Our estimate in this report differs from earlier audits because it is based on more current information. Also, the estimates in the financial statements assumed a "going concern" but the estimates in this report were based on terminating the program.
- 6. FAS misinterpreted the proposed recommendation in our draft report. Since FAS officials told us that they were only implementing Congressional intent, we have changed our previous recommendation to a "Matter for Congressional Consideration."
- 7. Since there is no convincing evidence that these programs have increased U.S. agricultural exports worldwide, it is difficult to justify these programs' high costs based on their market development in particular countries. These programs may simply reroute U.S. agricultural exports away from nonparticipating countries and towards participating countries without increased benefits to U.S. agriculture. We do, however, note in the report that ccc believes these programs are important for market

<sup>&</sup>lt;sup>2</sup>For September 30, 1981, to June 30, 1992, the total amounts outstanding under the programs grew an average of 16.9 percent annually; loan guarantees grew at an average of 12.8 percent annually; and accounts receivable grew at an average of 49.2 percent annually.

development. We also note that CCC has sometimes granted much larger guarantees than its credit analysts recommended, giving market development as the reason. We also note that certain program officials have told us that in the past the reasons were sometimes for political or for foreign policy purposes.

8. We continue to believe that the unregulated secondary market for LDC debt is the best available measure of the value of these programs' outstanding guarantees and accounts receivables. Furthermore, the fact that five market participants queried by Foreign Agricultural Service said that the secondary market is not appropriate for valuing trade credits has no bearing on the conclusions of this review. The GSM-102/103 programs typically guarantee loans with 3-year maturities, not the 1/4- and 1/2-year maturities typical of trade credits. Furthermore, the secondary market for LDC debt provides the same characteristics of many functioning securities markets. It (1) is self correcting; (2) appears to have minimal outside forces operating on it other than the risk-reward evaluation by a large number of participants—banks, insurance companies, pension funds, and private investors—during the time we collected our price data; (3) has substantial volume and appears to be efficient; and (4) has a wide variety of instruments with differing lengths of maturity and other characteristics. Although occasionally there have been market forces other than the risk-reward decisions of market participants during the recent past, they do not appear to have been present during the period for which we obtained our price data and performed our market analysis.

The regression explaining prices on variable interest rate, dollar-denominated debt that was owed by governments had a high degree of explanatory power. We found that market prices on this type of debt were very closely related to professionally recognized ratings of the debtor's creditworthiness. Furthermore, as predicted by capital market theory, price was inversely related to a debt instrument's maturity. Further, our sample of debt instruments used to estimate the regression included a substantial proportion of shorter-term debt instruments (with maturities of 1 to 5 years), and these fit our estimated regression more closely, on the average, than did the rest of our sample. This fact reinforces our belief that the regression is applicable to shorter-term as well as longer-term debt instruments.

Finally, we believe that assigning the host government responsibility for repaying GSM debt does not make the debt any less risky than the

Appendix III
Agency Comments and Our Evaluation

secondary market debt we used in our estimation methodology. In both cases the debt is owed by the foreign government.

9. The relevant issue is what is the best method to transform credit ratings into prices. We believe the method we used, which transforms professionally recognized ratings into prices using an efficient, self-correcting market, is more likely to give an unbiased measure of the ccc's costs.

In contrast, the CCC's proposed transformation is subject to biases that tend to underestimate costs. Since the CCC's analysts do not base their transformation on secondary market prices, they must base their estimates on the CCC's historical payouts and/or on subjective judgment. If estimates are based on the CCC's historical payouts, then costs will likely be underestimated for the same reasons we gave in comment 5: (1) Historically, there are plenty of incentives for LDCs to treat CCC temporarily as a preferred creditor in order to obtain more and larger credits; (2) actual historical payouts are underestimates of incurred payouts, because CCC paid out only on individual delinquent payments and not the entire loan. If CCC analysts base their estimates on subjective judgment, then they will be especially susceptible to institutional pressure to underestimate costs.

# Major Contributors to This Report

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## Related GAO Products

International Trade: Soviet Agricultural Reform and the U.S. Government Response (GAO/NSIAD-91-152, June 28, 1991).

The Soviet Union's Participation in the Agriculture Department's Export Credit Guarantee Programs (GAO/T-NSIAD-91-38, May 21, 1991).

Loan Guarantees: Export Credit Guarantee Programs' Long-Run Costs Are High (GAO/NSIAD-91-180, Apr. 19, 1991).

Iraq's Participation in the Commodity Credit Corporation's GSM-102/103 Export Credit Guarantee Programs (GAO/T-NSIAD-91-13, Mar. 14, 1991).

International Trade: Iraq's Participation in U.S. Agricultural Export Programs (GAO/NSIAD-91-76, Nov. 14, 1990).

Report on the Commodity Credit Corporation's GSM-102/103 Export Credit Guarantee Programs and Iraq's Participation in the Programs (GAO/T-NSIAD-91-01, Oct. 16, 1990).

International Trade: Export of Wood Products Under Federally Assisted Export Programs (GAO/NSIAD-90-264, July 31, 1990).

Status Report on GAO's Reviews of the Targeted Export Assistance Program, the Export Enhancement Program, and the GSM-102/103 Export Credit Guarantee Programs (GAO/T-NSIAD-90-53, June 28, 1990).

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